CURRICULUM VITAE				
PADMANABHAN SRINAGESH				
POSITION	Director, LitiNomics (October 2009 to Present)			
EDUCATION	Ph. D., Economics, University of Rochester M.A., Economics, University of Rochester M.A., Economics, Delhi School of Economics, India B.A., Economics (Honors), St. Stephen's College, Delhi University, India			
RANGE OF EXPERIENCE	Experience includes expert reports and consulting services in antitrust and intellectual property litigation, class actions, and regulatory proceedings.			
PROFESSIONAL AND BUSINESS HISTORY	ERS Group (Emeryville, California) Principal, May 2006 – September 2009 University of California, Merced (Merced, California) Visiting Lecturer, Spring 2006 CRA International, Inc. (Palo Alto, CA) Principal, October 1996 – May 2006 Telcordia, formerly Bellcore (Morristown, New Jersey) Senior Economist, 1995-1996 Member of Technical Staff, 1988 – 1995 Williams College (Williamstown, Massachusetts) Assistant Professor, 1983 – 1988 University of Illinois at Chicago (Chicago, Illinois) Assistant Professor, 1979 – 1983			
AWARDS RECEIVED	President's Award, Bellcore, 1993 Department of Economics Fellowships, University of Rochester, 1974- 1976 National Science Talent Scholarship, India, 1969			
PUBLICATIONS	"Dispelling the Myths of the Three-Tier Distribution System," with David Sibley, Report prepared for the <i>Wine and Spirits Wholesalers of America</i> , 2008.  "Emerging Network Technologies," with D. Hatfield and B. Mitchell. <i>Handbook of Telecommunications Economics</i> , Vol. 2, S. K. Majumdar, M. Cave, I. Vogelsang, eds., North Holland, 2006.  "Evaluating the Competitive Effects of Mergers of Internet Backbone Providers," with Stanley Besen and Jeffrey Spigel. <i>ACM Transactions on Internet Technology</i> , v 2, no. 3, 187-204.  "Advances in Routing Technologies and Internet Peering Agreements," with Stanley Besen, Paul Milgrom and Bridger Mitchell. <i>Papers and Proceedings of the One Hundred and Thirteenth Meeting of the American Economic Association</i> , v. 91, No. 2, 292-296.			

## PUBLICATIONS (continued)

"Competitive Effects of Internet Peering Policies," with Paul Milgrom and Bridger Mitchell, in *The Internet Upheaval: Selected Papers from the 1999 Telecommunications Policy Research Conference*, edited by Benjamin Compaine and Ingo Vogelsang. The MIT Press, Cambridge, 2000.

"An Economic Analysis of Telephone Number Portability," with Bridger Mitchell, in *Competition, Regulation and Convergence: Current Trends in Telecommunications Policy Research*, edited by Sharon Eisner Gillett and Ingo Vogelsang. Lawrence Erlbaum, Mahwah. 1999.

"Multiproduct Nonlinear Pricing with Multiple Taste Characteristics," with David S. Sibley. *The RAND Journal of Economics*, Volume 28, Number 4, Winter 1997. Pages 684-707.

"Why Build a Dedicated ITS Communications Infrastructure," with R. S. Arden. In L. Branscomb and B. Kahin (eds.), *Converging Infrastructures: Intelligent Transportation and the National Information Infrastructure.*Cambridge, MA: The MIT Press, 1996.

"Economic Analysis of Network Architectures," with J. Gong. *IEEE Network* (March/April 1996).

"Economic Issues," with B. Mitchell. Chapter in R. Anderson, T. Bikson, S. Law, and B. Mitchell (eds.), *Universal Access in E-Mail: Feasibility and Societal Implications*. The RAND Corporation, 1995.

"Economics of Layered Networks," with J. Gong. *Journal of Electronic Publishing* (1995).

"Internet Cost Structures and Interconnection Arrangements," In G. Brock (ed.), *Proceedings of the Telecommunications Policy Research Conference of 1994*. Erlbaum Press, 1995.

"Issues in the Pricing of Broadband Telecommunications Services," with B. Chakravorty and W. Sharkey. In W. Lehr (ed.), *Quality and Reliability of the Telecommunications Infrastructure*. Erlbaum Press, 1995.

"Efficient Price and Capacity Choices under Uncertain Demand: An Empirical Analysis," with M. Koschat and L. Uhler. *The Journal of Regulatory Economics* (January 1995).

"Telephone Company Entry into Cable Television," with M. Goodman, K. Lu, W. Sharkey, and N. Stolleman. *Telecommunications Policy* (March 1993).

"Bilateral Distortion in Self-Selection Problems," with R. Bradburd and H. Koo. *The Journal of Industrial Economics* (June 1992).

"Ex Post vs. Ex Ante Pricing: Optional Calling Plans and Tapered Tariffs," with K. Clay and D. Sibley. *The Journal of Regulatory Economics* (June 1992).

"Mixed Linear-Nonlinear Pricing with Bundling," *The Journal of Regulatory Economics*, (September 1991): 251–263.

## **PUBLICATIONS** "Quality Distortion with Discriminating Monopoly," with R. Bradburd. The American Economic Review (1989): 96-105. (continued) "Uncertain Lifetime and Ordinal Impatience," with R. Peck. *Economic* Letters (1987): 121-125. "Nonlinear Prices and the Regulated Firm," The Quarterly Journal of Economics (February 1986): 51-68. "Time Preference, Time Consistency, and Uncertain Lifetime," with R. Peck. The American Economist (Fall 1986): 41-45. "Nonlinear Prices with Heterogeneous Consumers and Uncertain Demand," The Indian Economic Review (July/December 1985): 299-315. "Uncertain Lifetime and Positive Time Preference," with R. Peck. Proceedings of the Illinois Economic Association, 1984. "On Nonlinear Tariff Schedules," With N. Saidi. The Journal of International Economics (May 1981): 173-195. "Discriminatory Pricing Under Uncertainty," Proceedings of the Illinois Economic Association, 1980. "Economic Analysis of Proposition 218 and Municipal Water Rates," WORKING Draft, May 2015. **PAPERS**

Lhost and D.S. Sibley.

"The Economics of Surcharging Credit Card Transactions," with J.R.

## EXPERT REPORTS

Submitted a Declaration for Plaintiffs in *In Re: American Express Anti-Steering Rules Antirust Litigation*, July 22, 2013.

Submitted an Expert Report for Defendants in *Raymond Buckley et al v. New Hampshire Republican State Committee et al,* to the State of New Hampshire Superior Court, Northern District, Docket No. 04-E-0328. November 1, 2006.

Submitted Joint Declaration of Luke Froeb, Padmanabhan Srinagesh and Michael Williams *In Support Of Comments Of Hearst-Argyle Television, Inc.*, to the Federal Communications Commission, October 2006.

Submitted a report with Luke Froeb and Michael Williams, "Efficiencies Associated with ANG's Acquisition of Knight Ridder Newspapers," to the Department of Justice. July 6, 2006.

Submitted a report with Ian Munro, "Review of 'Renewal of Spectrum Rights For Cellular Services: Pricing Methodology (Final Draft Report By PWC-NZIER)'," to the Ministry of Economic Development, New Zealand. May 16, 2006.

Submitted a report with Moya Dodd, Henry Ergas and Ed Wong, "International Roaming Regulation: Implications from Case Studies," to the European Commission on behalf of Vodafone. May 2006.

Submitted a report with Bridger M. Mitchell, "Economic Analysis of Fixed-To-Mobile Call Termination Charges," to BellSouth International for use in Latin American regulatory proceedings. July 2003.

Submitted a report with Jose L. Alberro and Bridger M. Mitchell, "International Comparisons of Interconnection Rates – United States and Mexico," to Telmex SA for use I n WTO Proceedings, 2000.

Submitted a report with Bridger M. Mitchell, "*Transport and Termination in PCS Networks*," to the Federal Communications Commission on behalf of Sprint PCS, 2000.

Submitted a report, "*Review of the PIE Model,*" to the Australian Competition and Consumer Commission on behalf of Telstra Corporation Limited, 1999.

Submitted a report with Stanley M. Besen and John R. Woodbury, "An Economic Analysis of the Proposed Bell Atlantic/GTE Merger," to the Federal Communications Commission on behalf of Sprint Communications Company, L.P., 1998.

Submitted a report with Stanley M. Besen and John R. Woodbury, "*An Economic Analysis of the Proposed SBC/Ameritech Merger*," to the Federal Communications Commission on behalf of Sprint Communications Company, L.P., 1998.

Submitted a report with Stanley M. Besen and John R. Woodbury, "An Economic Analysis of the Impact of the WorldCom-MCI Merger on the Provision of Internet Backbone Services," to the Federal Communications Commission and the European Commission on behalf of Sprint Corporation, 1998.

Submitted a report with Bridger M. Mitchell and Steven R. Brenner, "An *Economic Analysis of Terminating Access*," to the Federal Communications Commission, 1997.

## **CASES (Client in bold)**

Lawsuit	Court	Law Firm	Work Performed
Function Media, LLC v. Google Inc. and Yahoo! Inc.	U.S. District Court, Eastern District of Texas (Marshall)	Quinn Emmanuel	Patent Infringement/Damages Analysis
Power Integrations Inc. v. Fairchild Semiconductor International, Inc.	United States District Court for The District of Delaware	Orrick, Herrington & Sutcliffe	Patent Infringement/Damages Analysis
<b>Abbott Laboratories</b> , et al. v. Sandoz, Inc.	U.S. District Court, Northern District of Illinois	Munger, Tolles & Olson LLP	Patent Infringement/Damages Analysis
In re: Payment Card Interchange Fee and Merchant-Discount Antitrust Litigation (Merchant Class)	U.S. District Court, Eastern District of New York	Multiple law firms	Consult on economic analyses of class certification, liability and damages
In re: American Express Anti- Steering Rules Antitrust Litigation ( <b>Merchant Class</b> )	U.S. District Court, Southern District of New York	The Friedman Law Group, LLP	Antitrust Liability and Damages Analysis, Class Certification
<b>The Marcus Corporation</b> v. American Express Company et al	U.S. District Court, Southern District of New York	The Friedman Law Group, LLP	Antitrust Liability and Damages Analysis, Class Certification

Wheeler v. Pilgrim's Pride Corp. and <b>Tyson Foods, Inc</b> .	U.S. District Court, Eastern District of Texas	Howrey	Antitrust Liability and Damages Analysis
Hope for Families & Community Service, Inc., et al v. David Warren, et al	U.S District Court, Middle District of Alabama (Eastern Division)	Spotswood, Sansom & Sansbury	Analyzed economic impact of restrictive bingo licensing rules in Macon County
Consulting work for <b>Sprint</b> and Nextel related to their proposed merger	N/A	N/A	Merger Analysis
Polargrid LLC v. VSNL	Arbitration	Brown Rudnick	Evaluated likely outcome of auction but for allegedly fraudulent contract
FotomediaTechnologies, LLC v. AOL LLC, America Online, Inc., <b>Photobucket.com, Inc.,</b> Shutterfly, Inc., CNET Networks, Inc., and Yahoo! Inc.	U.S. District Court, Eastern District of Texas (Marshall)	Orrick, Herrington & Sutcliffe	Antitrust Counterclaim, Patent Misuse
Consulting work for the Canadian Competition Bureau	N/A	N/A	Assisted the Competition Bureau in analyzing the proposed merger of two Canadian TV networks
Consulting work for Wine and Spirits Wholesalers of America	N/A	N/A	Co-authored a paper analyzing the Three-Tier System for distributing

		alcoholic beverages
Eighteenth Judicial Circuit, Brevard County, Florida	Epstein Becker & Green	Antitrust Liability, Geographic market definition
N/A	Covington & Burling	Analysis of concentration in spectrum holdings
U.S. District Court, Northern District of California	AT&T	Rebut plaintiff expert's liability analysis
New York State Supreme Court, New York County	Cooley Godward Kronish	Analyze efficient auction design with asymmetric bidders
U.S. District Court, Eastern District of Virginia	Quinn Emanuel	Analyze invalidity of a patent related to electronic auctions
U.S. District Court, District of Kansas	Susman Godfrey	Analyze allegation of price fixing scheme to over-recover USF charges
U.S. District Court, Central District of California (Western Division)	N/A	Damages Analysis
	Brevard County, Florida  N/A  U.S. District Court, Northern District of California  New York State Supreme Court, New York County  U.S. District Court, Eastern District of Virginia  U.S. District Court, District of Kansas  U.S. District Court, Central District of California (Western	N/A  Covington & Burling  U.S. District Court, Northern District of California  New York State Supreme Court, New York County  Cooley Godward Kronish  Court, New York County  U.S. District Court, Eastern District of Virginia  U.S. District Court, District of Kansas  V.S. District Court, Central District of California (Western  N/A

U.S. District Court, District of Delaware	Rader, Fishman & Grauer	Damages Analysis  Damages Analysis
U.S. District Court, District of Delaware	Rader, Fishman & Grauer	Damages Analysis
U.S. District Court, Eastern District of Texas	Rader, Fishman & Grauer	Damages Analysis
U.S. District Court, Eastern District of Virginia	Morgan Lewis Bockius	Damages Analysis
U.S. District Court, Central District of California	Frisenda, Quinton & Nicholson	
U.S. District Court, Eastern District of Texas	Robins, Kaplan, Miller & Ciresi	Damages Analysis
U.S. District Court, Southern	Latham & Watkins	Damages Analysis  Damages Analysis
U.S. District Court, District of Delaware	Morgan Lewis & Bockius	Damages Analysis
	U.S. District Court, District of Delaware  U.S. District Court, Eastern District of Texas  U.S. District Court, Eastern District of Virginia  U.S. District Court, Central District of California  U.S. District Court, Eastern District of Texas  U.S. District Court, Eastern District of Texas  U.S. District Court, Southern District of California  U.S. District Court, District of	U.S. District Court, District of Delaware  U.S. District Court, Eastern District of Texas  U.S. District Court, Eastern District of Virginia  U.S. District Court, Eastern District of Virginia  U.S. District Court, Central District of California  U.S. District Court, Eastern District of Texas  U.S. District Court, Eastern District of California  U.S. District Court, Eastern District of Texas  U.S. District Court, Southern District of California  U.S. District Court, District of Morgan Lewis & Bockius

Volterra Semiconductor Corp. v. Primarion, Inc., Infineon Technologies AG and Infineon Technologies North America Corp.	U.S. District Court, Northern District of California	Farella Braun & Martell	Damages Analysis
SanDisk Corporation v. Round Rock Research, LLC	U.S. District Court, Northern District of California	Desmarais LLP	Damages Analysis
Rovi Corporation v. Amazon	U.S. District Court, Northern District of California	Durie Tangri	Damages Analysis
Rovi Corporation v. Hulu	U.S. District Court, Northern District of California	Durie Tangri	Damages Analysis
Microunity Systems Engineering Inc., v. Texas Instruments; Fujitsu Microelectronics America Inc.; Marvell Semiconductor Inc.; NEC Electronics America Inc.; Nvidia Corp; NXP Semiconductors USA Inc.; Qualcomm Inc.; Samsung Semiconductor Inc.; ST Microelectronics Inc.	US District Court: Eastern Division of TX, Marshall Division	Texas Instruments	Damages Analysis
Fieldturf USA, Inc.; Fieldturf Tarkett, Inc. v. <b>Astroturf</b> , <b>LLC</b>	US District Court: Eastern District of MI, Southern Division	Rader Fishman & Grauer PLLC	Damages Analysis

C-Cation Technologies v. Comcast Corp; Charter Communications; Cequel Communications LLC (dba Suddenlink Communications); Cable One Inc; Almega Cable Inc; Longview Cable Television Company Inc; Kilgore Video Inc.	US District Court: Eastern District of TX, Marshall Division	Kenyon & Kenyon LLP / McKool Smith	Damages Analysis
Anesta AG, Aptalis Pharmatech, Inc. and IVAX International GmbH v. Mylan Pharmaceuticals, Inc. and Mylan, Inc. Civil Ac-tion No. 08-889-SLR (2014)**	U.S. District Court, District of Delaware	Wiley Rein	Damages Analysis
N.A. Water Systems, LLC v.  Aquatech International Corp. and Debasish Mukhopadhyaya	U.S. District Court, Western District of Pennsylvania	Frisenda, Quinton, and Nicholson	Damages Analysis
<b>BrightEdge Tecnologies Inc.</b> v Searchmetrics GMBH and Searchmetrics, Inc.	U.S. District Court, Northern District of California, San Jose Division	Baker Botts	Damages Analysis
ACCO Brands USA, LLC v. Comarco Wireless Technologies	U.S. District Court, Northern District of California, San Francisco Division	Pilsbury Wihtrop Shaw Pittman LLP	Damages Analysis
TQP Development, LLC v. <b>Dish</b>	US District Court: Eastern	Baker Botts	Damages Analysis

Network	District of TX, Marshall Division		
GO Computer Inc. v. Microsoft Corporation	Superior Court of California, City/County of San Francisco	Kellogg, Huber, Hansen, Todd, Evans & Figel P.L.L.C.	Damages Analysis
TQP Development, LLC v. Hughes Network Systems, LLC	US District Court: Eastern District of TX, Marshall Division	Baker Botts	Damages Analysis
US Ethernet Innovations, LLC v. Texas Instruments, Inc.	US District Court: Eastern District of TX, Tyler Division	Roth Law Firm	Damages Analysis
CopyTele, Inc. v AU Optronics Corporation	International Centre for Dispute Resolution, International Arbitration Tribunal	Lieff Cabraser Heimann & Bernstein	Damages Analysis